Model 514B User Guide

GENERAL

The Shure 514B is a low impedance, dynamic, hand-held microphone designed for paging and public address systems. It provides clear, natural voice response and high intelligibility.

The 514B connects to microphone inputs rated at 19 to 300 Ω. It can be used in applications that require long cable lengths, or where severe hum conditions are present. For connection to high impedance inputs, use Shure A95 Series Line Matching Transformers.

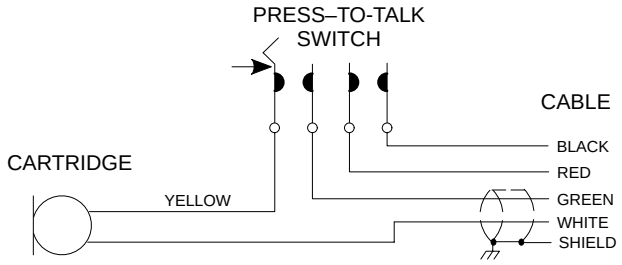
The microphone is provided with a four-conductor (two shielded) coiled cable and a "Million-Cycle" leaf-type switch designed for constant use under the most rigorous conditions. The 514B fits naturally and comfortably in the hand and is not affected by heat or humidity. The exclusive ARMO-DUR® case resists mechanical shocks and vibration, and is impervious to oil, fumes, salt spray, ultraviolet radiation, and corrosion.

Features

- *Smooth, extended frequency response from 100 to 6,000 Hz—provides highly intelligible voice response*
- *"Million-Cycle" leaf-type switch—provides outstanding reliability, even under extreme conditions*
- *Tough ARMO-DUR® case*
- *Long-life, neoprene-jacketed, coiled cable*
- *Supplied mounting bracket fits hang-up button on back of microphone*

CONNECTIONS

Refer to Figure 1 and Table 1 below. The GREEN wire is connected to the positive audio input, the WHITE wire is connected to the negative audio input, and the SHIELD is connected to chassis ground. The RED and BLACK leads control the external relay or switching circuit.



INTERNAL CONNECTIONS
FIGURE 1

Table 1. Typical Cable-to-Connector Wiring

INPUT TYPE	WIRE COLOR	FUNCTION	XLR CONNECTOR	1/4 IN. PHONE JACK
BALANCED	GREEN	AUDIO +	PIN 2	TIP
	WHITE	AUDIO –	PIN 3	RING
	SHIELD	CHASSIS GROUND	PIN 1	SLEEVE

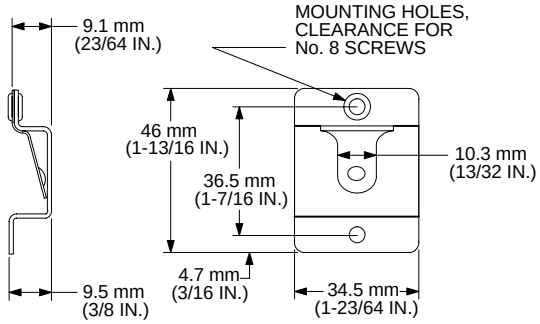
NOTE: The RED and BLACK leads are not part of the audio circuit. These wires provide a contact closure when the press-to-talk switch is depressed. This closure may be used to control an external relay or a transmit/receive circuit.

OPERATION

To operate the microphone, simply hold down the press-to-talk switch and begin speaking. Release the switch when you are finished speaking.

MOUNTING

The 514B is supplied with a mounting bracket to provide a snap-in hang-up for the microphone when it is not in use. The bracket has mounting holes with clearance for No. 8 screws. See Figure 2 below.



MOUNTING BRACKET
FIGURE 2

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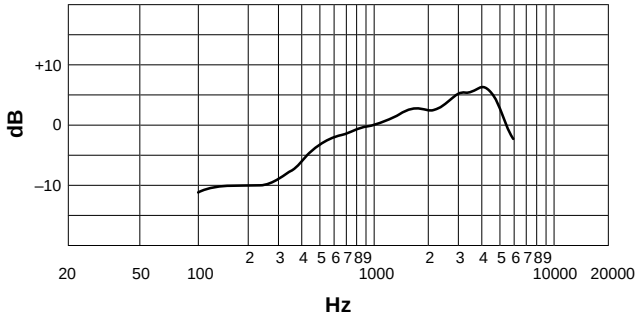
SPECIFICATIONS

Type

Dynamic

Frequency Response

100 to 6,000 Hz (see Figure 3)



TYPICAL FREQUENCY RESPONSE
FIGURE 3

Impedance

Microphone rating impedance is 150 Ω (200 Ω actual) for connection to microphone inputs rated at 19 to 300 Ω.

Output Level

Open Circuit Voltage . . . . . –36.5 dB (15 mV)*
–56.5 dBV/Pa (1.5 mV)**

*0 dB = 1 volt per 100 microbars
**1Pascal = 94 dB SPL

Switch

Push-to-talk, leaf-type switch to actuate microphone circuit and relay or switching circuit. Microphone circuit normally open.

Cable

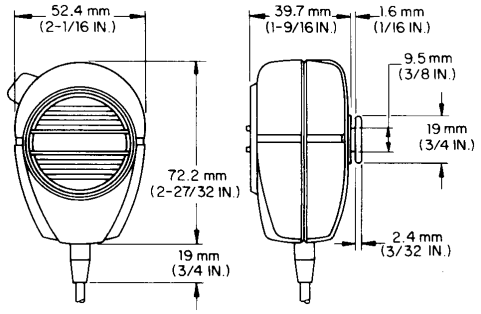
1.5 m (5 ft) extended, four-conductor, two-conductors shielded, neoprene-jacketed, coiled cable

Case

Matte black ARMO-DUR®

Dimensions

See Figure 4



OVERALL DIMENSIONS
FIGURE 4

Net Weight

200 grams (7 oz)

Packaged Weight

372 grams (13 oz)

CERTIFICATION

Conforms to European Union directives, eligible to bear CE marking; meets European Union EMC Immunity Requirements (EN 50082–1, 1992).

FURNISHED ACCESSORY

Mounting Bracket (3 in kit) RK6MB

OPTIONAL ACCESSORY

Line Matching Transformer . . . . . A95 Series

REPLACEMENT PARTS

Dynamic Cartridge R103
Switch RK15S
Cable Assembly C25C

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